Distributed by:

JAMECO® ELECTRONICS

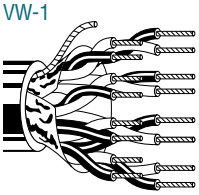
www.Jameco.com ✦ 1-800-831-4242

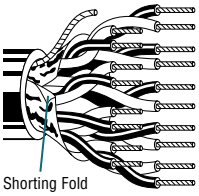
The content and copyrights of the attached material are the property of its owner.

Overall Beldfoil® Shield

High-Temperature Control and Instrumentation Cables and Computer Cables for EIA RS-232 Applications

Jameco Part Number 232531 (9504-060-1000)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
20 AWG Stranded Conductors (7x28) • Tinned Copper • Pairs Cabled Together • Overall 100% Beldfoil Aluminum-Kapton® Shield • Drain Wire																		
Tefzel® Insulation • Clear Tefzel Material Jacket																		
High-Temperature 300V RMS, 150°C VW-1 	**85164**		4	Black & Red, Black & White, Black & Green, Black & Blue	100 500† 1000†	30.5 152.4 304.8	8.4 37.0 71.0	3.8 16.8 32.3	.015	.38	.025	.64	.344	8.74	23	75	40	131
	85168		8	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White	100 500† 1000†	30.5 152.4 304.8	13.5 62.0 126.0	6.1 28.2 57.3	.015	.38	.025	.64	.439	11.15	23	75	40	131

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) CSA AWM I A  Shorting Fold	**9501**	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.1 7.5 7.0 14.0 14.0	1.0 3.4 3.2 6.4 6.4	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.156	3.96	75	60%	40	131	74	243
	9502††	NEC: CMG CEC: CMG FT4 P-MSHA-SC-7K-182037	2	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000 10000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	3.7 14.5 15.0 28.0 29.0 290.0	1.7 6.6 6.8 12.7 13.2 131.8	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.222	5.64	75	60%	30	98	50	164
													For Plenum version of 9502, see 82502.					
	9503	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.9 14.5 15.0 29.0 29.0	1.8 6.6 6.8 13.2 13.2	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.232	5.89	75	60%	30	98	50	164
													For Plenum versions of 9503, see 89503 or 82503.					
	9504	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.5 17.5 18.0 35.0 35.0	2.0 8.0 8.2 15.9 15.9	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.265	6.73	75	60%	30	98	50	164
													For Plenum versions of 9504, see 89504 or 82504.					
	9505	NEC: CMG CEC: CMG FT4	5	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.5 22.0 22.5 43.0 44.0	2.5 10.0 10.2 19.5 20.0	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.289	7.34	75	60%	30	98	50	164
													For Plenum versions of 9505, see 89505 or 82505.					

DCR = DC Resistance • TC = Tinned Copper

* Capacitance between conductors.
** Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.
†† Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration certification. Request quotations of RG/U cables not listed.

See Attenuation, Rise Time and Bit Rate data for this series on page 5.10.

Tefzel and Kapton are DuPont trademarks.

Belden® Color Code Charts

Color Code Chart No. 1

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

18 Gage conductors in cables 8446 through 8449 are Black and White.

Color Code Chart Nos. 2 and 2R — ICEA (Insulated Cable Engineers Association) Standard*

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/Black Stripe
8	Red/Black Stripe
9	Green/Black Stripe
10	Orange/Black Stripe
11	Blue/Black Stripe
12	Black/White Stripe
13	Red/White Stripe

Cond. No.	Color
14	Green/White Stripe
15	Blue/White Stripe
16	Black/Red Stripe
17	White/Red Stripe
18	Orange/Red Stripe
19	Blue/Red Stripe
20	Red/Green Stripe
21	Orange/Green Stripe
22	Black/White/Red
23	White/Black/Red
24	Red/Black/White
25	Green/Black/White
26	Orange/Black/White

Cond. No.	Color
27	Blue/Black/White
28	Black/Red/Green
29	White/Red/Green
30	Red/Black/Green
31	Green/Black/Orange
32	Orange/Black/Green
33	Blue/White/Orange
34	Black/White/Orange
35	White/Red/Orange
36	Orange/White/Blue
37	White/Red/Blue
38	Black/White/Green
39	White/Black/Green

Cond. No.	Color
40	Red/White/Green
41	Green/White/Blue
42	Orange/Red/Green
43	Blue/Red/Green
44	Black/White/Blue
45	White/Black/Blue
46	Red/White/Blue
47	Green/Orange/Red
48	Orange/Red/Blue
49	Blue/Orange/Red
50	Black/Orange/Red

* 2 = Spiral Stripe
2R = Ring Band Striping

Color Code Chart No. 3 for Paired Cables (Belden Standard)

Pair No.	Color Combination
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green
10	Red & Blue

Pair No.	Color Combination
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue
16	Green & Yellow
17	Green & Brown
18	Green & Orange
19	White & Blue
20	White & Yellow

Pair No.	Color Combination
21	White & Brown
22	White & Orange
23	Blue & Yellow
24	Blue & Brown
25	Blue & Orange
26	Brown & Yellow
27	Brown & Orange
28	Orange & Yellow
29	Purple & Orange
30	Purple & Red

Pair No.	Color Combination
31	Purple & White
32	Purple & Dark Green
33	Purple & Light Blue
34	Purple & Yellow
35	Purple & Brown
36	Purple & Black
37	Gray & White

Color Code Chart No. 4 for Paired Cables

Pair No.	Color Combination
1	White & Blue
2	White & Orange
3	White & Green
4	White & Brown
5	White & Gray

Pair No.	Color Combination
6	Red & Blue
7	Red & Orange
8	Red & Green
9	Red & Brown
10	Red & Gray

Pair No.	Color Combination
11	Black & Blue
12	Black & Orange
13	Black & Green
14	Black & Brown
15	Black & Gray

Pair No.	Color Combination
16	Yellow & Blue
17	Yellow & Orange
18	Yellow & Green
19	Yellow & Brown
20	Yellow & Gray

Pair No.	Color Combination
21	Violet & Blue
22	Violet & Orange
23	Violet & Green
24	Violet & Brown
25	Violet & Gray

Color Code Chart No. 5 for Paired Cables (Western Electric Standard)

Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe

Pair No.	Color Combination
6	Red/Blue Stripe & Blue/Red Stripe
7	Red/Orange Stripe & Orange/Red Stripe
8	Red/Green Stripe & Green/Red Stripe
9	Red/Brown Stripe & Brown/Red Stripe
10	Red/Gray Stripe & Gray/Red Stripe

Pair No.	Color Combination
11	Black/Blue Stripe & Blue/Black Stripe
12	Black/Orange Stripe & Orange/Black Stripe
13	Black/Green Stripe & Green/Black Stripe
14	Black/Brown Stripe & Brown/Black Stripe
15	Black/Gray Stripe & Gray/Black Stripe

Pair No.	Color Combination
16	Yellow/Blue Stripe & Blue/Yellow Stripe
17	Yellow/Orange Stripe & Orange/Yellow Stripe
18	Yellow/Green Stripe & Green/Yellow Stripe
19	Yellow/Brown Stripe & Brown/Yellow Stripe
20	Yellow/Gray Stripe & Gray/Yellow Stripe

Pair No.	Color Combination
21	Purple/Blue Stripe & Blue/Purple Stripe
22	Purple/Orange Stripe & Orange/Purple Stripe
23	Purple/Green Stripe & Green/Purple Stripe
24	Purple/Brown Stripe & Brown/Purple Stripe
25	Purple/Gray Stripe & Gray/Purple Stripe